

Workplace bullying and burnout: the moderating effects of social support

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Abstract

This study aims to investigate the moderating effects of social support on the link between workplace bullying and burnout. This correlational study includes 222 employees recruited from various industry sectors. Participants completed the Revised Negative Acts Questionnaire, the Maslach Burnout Inventory, and the Social Support Scale. Colleague and supervisor support moderated the relationship between both work- and person-related bullying with burnout while family and senior management support moderated the links between burnout and person-related and physically intimidating bullying respectively. High levels of emotional support were associated with greater emotional exhaustion in work-related and overall bullying. Different forms of social support moderated the links between different forms of workplace bullying and different components of burnout. The present findings may inform anti-bullying prevention programs and interventions supporting bullying victims.

A significant number of employees across different sectors experience bullying in their workplace (Samnani & Singh, 2012). Although no legal definition exists at present, workplace bullying is described by experts as a range of repetitive negative behaviors targeted at an individual or group, such as ignoring or excluding, making belittling remarks, spreading malicious rumors, undervaluing one's contribution, and undermining one's integrity (Einarsen, Hoel, Zapf, & Cooper, 2003; Saunders, Huynh, & Goodman-Delahunty, 2007). The terms harassment and mobbing have also been used to describe similar patterns of hostile behavior (Leymann, 1996; Rospenda & Richman, 2004). Authors have distinguished between different types of workplace bullying, each having its own particular characteristics and carrying different consequences for the victims. Bullying behaviors can be direct such as verbal abuse or open accusations, or indirect such as spreading rumors or socially isolating someone (O'Moore, Seigne, McGuire, & Smith, 1998). Authors have also distinguished between the subjective perception of being bullied and the presence of objective evidence that bullying indeed takes place (Bjorkqvist, Osterman, & Hjeltback, 1994). Finally, Einarsen, Hoel, and Notelaers (2009) make a further important distinction between bullying focused on an individual's job performance (e.g. persistently criticizing a person's work) and that focused on the person him/herself (e.g. undermining one's integrity as a person). These authors report that between work-related and person-related bullying, the former has the most negative consequences, including higher levels of psychological distress, more stressful relationships with colleagues, lower organizational commitment, and lower organizational satisfaction.

Studies provide evidence for the negative effects of workplace bullying on both mental and physical health. Victimized employees are at increased risk for depression, anxiety, post-traumatic stress, and substance misuse (Brotheridge & Lee, 2010; Rex-Lear, Knack, & Jensen-Campbell, 2012; Rodriguez-Munoz, et al., 2010) as well as cardiovascular disease, obesity, headaches, and other somatic complaints

(Kivimaki, Virtanen, Vartio, Elovainio, & Vahtera, 2003; Rex-Lear et al., 2012). Research has also highlighted the negative effects of workplace bullying on burnout (Deery, Walsh, & Guest, 2011; Giorgi, Mancuso, Fiz Perez, Castiello D'Antonio, Mucci, Cupelli, et al., 2016). Burnout is the detrimental psychological outcome of prolonged work-related stress, manifested in emotional exhaustion, depersonalisation (emotional distancing from the work and the people involved), and a decreased sense of personal accomplishment (Maslach, Jackson, & Leiter, 1996; Maslach, Schaufeli, & Leiter, 2001). According to more recent formulations, burnout components develop in parallel and not sequentially as it was previously thought: increased work demands lead to emotional exhaustion while limitations in work resources lead to either depersonalization or reduced personal accomplishment (Demerouti, et al., 2001; Leiter, 1993). Giorgi and colleagues (2016) suggest that employees who experience workplace bullying are more likely to suffer from burnout than those who do not, while Deery Walsh & Guest (2011) report that bullying from managers is the most detrimental, increasing four times the employees' intention to leave the job.

As it is the case with other occupational stressors (Sarason, Sarason, & Gurung, 2001), social support seems to be an essential resource protecting individuals from workplace bullying and its negative effects (De Beer, 2014; Gardner, et al., 2013). Social support has been discriminated into *received* or *structural* - the objective characteristics of one's social network - and *perceived* or *functional* - the subjective perception of support available (Cohen, Mermelstein, Kamarck, & Hoberman, 1985). Functional support has been more strongly associated with well-being (Cohen, Underwood, & Gottlieb, 2000) and further divided into *instrumental* - the provision of tangible, practical assistance - and *emotional* - the acknowledgement of another person's feelings and attempts to boost the other's morale (Declercq, et al., 2007). Some researchers suggest that social support moderates the detrimental effects of stressors on well-being (Cohen & Wills, 1985) while others argue that it mediates those effects (Lin & Ensel, 1984). Prins and colleagues emphasize the role of supervisor support in occupational stress (Prins, et al., 2007), while Jenkins & Elliot (2004) provide evidence for the

importance of colleague support and Deeter-Schmelz & Ramsey (1997) for the support provided by senior management. According to the matching hypothesis, different types of social support protect against the effects of different types of occupational stressors (Cohen & Wills, 1985). Based on the literature search conducted, the matching hypothesis has not yet been tested in relation to workplace bullying. In a meta-analytic study, Halbesleben (2006) found that while overall social support protected equally against the three burnout components, work-related support (e.g. colleagues) protected from emotional exhaustion while non-work-related support (e.g. family) protected from depersonalization and a reduced sense of personal accomplishment. Nonetheless, no study has established whether different types of workplace bullying relate in dissimilar ways to the different forms of social support and burnout components.

Although research on the role of social support in workplace bullying is in its initial stages, the small number of studies conducted have clearly highlighted its importance. Lack of social support predicted the experience of bullying by colleagues and managers among manufacturing employees (De Beer, 2014), while supervisor and colleague support reduced psychological strain among workers in various sectors who experienced workplace bullying (Gardner et al., 2013). Moreover, social support by family and friends mediated the relationship between workplace bullying and psychological distress among employees of various industries, so that victims tended to perceive less family and friend support and, as a result, experience greater distress (Cassidy, McLaughlin, & McDowell, 2014). Finally, manager authenticity and access to empowering work structures significantly reduced the experience of bullying and bullying-related burnout among nurses (Laschinger, et al., 2010; Laschinger & Fida, 2014).

Although the above studies have been informative, it has been unclear if particular forms of social support (e.g. manager vs. colleague support) have a greater protective effect against particular types of bullying (e.g. job-focused vs. person-focused) or if different burnout components are affected differently by the interactions between certain types of bullying and certain types of social support. To address this gap, two hypotheses were tested and two research questions explored. First, based on previous studies (Deery et al., 2011; Gardner et al., 2013), it was predicted that all three forms of workplace bullying would correlate positively with burnout, particularly exhaustion and cynicism, and

negatively with instrumental, emotional, supervisor, and colleague support. Second, based on previous research (Cohen et al., 2000; Gardner et al., 2013), it was hypothesized that both instrumental and emotional social support would moderate the link between bullying and burnout, but also it had to be specified which types of social support would moderate the effects of workplace bullying on which of the three components of burnout. Finally, this study aimed to find out which sources of support would moderate the effects of which types of bullying, in relation to which components of burnout. Answering these questions, would indicate the extent to which specific associations between different forms of social support, different occupational stressors, and different burnout components as reported in previous research (Cohen & Wills, 1985; Halbesleben, 2006) also hold in relation to workplace bullying. In addition to its theoretical importance, specifying such associations would inform more targeted and effective anti-bullying interventions.

Method

Design

This was questionnaire-based correlational study, including social support, workplace bullying, and burnout as the study variables. Basic demographic data were also collected.

Participants

The sample consisted of 222 employees across a wide range of industry sectors including the public sector, aviation, security services, education, and healthcare. Mean age was 36.67 (SD=11.25), while 131 participants (59%) were female and 91 (41%) male.

Measures

Revised Negative Acts Questionnaire (NAQ-R; Einarsen et al., 2009). This is a widely used measure of workplace bullying, consisting of 22 items and 3 subscales corresponding to three types of bullying (work-related, person-related, and physically-intimidating). Items are measured on a Likert scale from 1 (never) to 5 (daily). Studies suggest that the questionnaire has good scale reliability, construct validity against measures of mental health, psychosocial work environment and leadership, and criterion validity against measures of perceived victimization (Einarsen et al., 2009). Cronbach alphas in the current study were: $\alpha = .93$ for the whole scale, $\alpha = .84$ for person-

related bullying, $\alpha=.88$ for work-related bullying, and $\alpha=.77$ for physically intimidating bullying.

Maslach Burnout Inventory – General Survey (MBI-GS; Schaufeli, et al., 1996). This is an adaptation of the original Maslach Burnout Inventory, presenting internal consistency and good construct and external validity (Maslach & Jackson, 1981), aiming to measuring burnout in occupations other than the human services. The questionnaire consists of 15 items measuring frequency of experience on a 5-point Likert-scale (1/never to 5/daily) organised in three subscales – *exhaustion* *cynicism* and *professional efficacy* which is reversed- scored Cynicism corresponds to the depersonalization construct of the original questionnaire and professional efficacy corresponds to personal accomplishment. In the present study scale reliability was satisfactory: $\alpha=.79$ for the whole scale, $\alpha=.92$ for exhaustion, $\alpha=.92$ for cynicism, and $\alpha=.57$ for professional efficacy. Two items (12 and 13) were dropped from the original professional efficacy scale to improve reliability.

Social Support Scale (SSS; House & Wells, 1978). This questionnaire measures the two types of perceived social support (instrumental and emotional) from four sources (supervisor, colleagues, senior management, and family). It consists of 24 items measured on a 5-point Likert scale (1/not at all to 5/a lot). The reliability and validity of the measure has been evidenced in a number of studies involving health and social care workers (Constable & Russell, 1986; Jenkins & Elliot, 2004). In the present study, alpha was .96 for the whole scale, .94 for emotional support, .89 for instrumental, .95 for supervisor support, .93 for colleague support, .96 for management, and .94 for family support.

Procedure

Informed consent was obtained from gatekeepers and participants. An online link was sent to the employees of ten local organizations and businesses in and around Bedfordshire county, UK. Participants completed the data anonymously. The questionnaire pack was also made available on Facebook and contained contact details of helplines and counselling services supporting victims of bullying. Ethical approval was obtained from the ethics committee of the Psychology Department of the University of (removed for anonymity).

Results

To address the first hypothesis, bi-variate correlations were conducted, according to which all three forms of bullying were positively and substantially correlated with burnout, with work-related bullying being the strongest correlate (see Table 1). Pearson's r coefficient was significantly higher between work-related bullying and burnout than it was between person-related bullying and burnout ($z=2.44$, $p=.007$) and between physically intimidating bullying and burnout ($z=2.07$, $p=.018$). The coefficients in the person-related bullying/burnout and physically intimidating bullying correlations were not significantly different ($z=-.35$, $p=.361$). Professional efficacy did not correlate with any type of bullying other than with work-related bullying weakly. Moreover, all types of workplace bullying correlated negatively with social support, although physically intimidating bullying attained the lowest coefficient. Instrumental and emotional support seemed to correlate with workplace bullying with similar strength, and so also did supervisor and senior management support. Interestingly, family support was the only type of social support that did not correlate at all with workplace bullying.

Table

1

To address the second hypothesis and the first research question a series of hierarchical regressions were conducted, each time including total burnout or one of its components as the outcome variable, total bullying or one of its three types as the IV, and total social support or one of its two forms (instrumental or emotional) as the moderator (M) - see Table 2. Age and gender were entered at Step 1, IV and M at Step 2, and the interaction term at Step 3. Hierarchical regression is the standard statistical method utilized to test moderation effects, as its accuracy and primacy over other alternatives have been supported by strong empirical evidence (Paunonen & Jackson, 1988). These authors argue that the method is robust against multicollinearity and scale bias, while the rate of Type I error is low, nominally .05 at $\alpha=.05$. Although many regressions were conducted in the present study, most were statistically significant, suggesting a low probability for Type I error.

According to the findings, both instrumental and emotional support moderated the effects of workplace bullying on burnout; however, instrumental support tended moderated more strongly the effects of bullying on cynicism while emotional support moderated more strongly

the relationship between bullying and emotional exhaustion. The effects of physically intimidating bullying on burnout were moderated only by emotional support, while the moderation effects of instrumental support on the link between physically intimidating bullying and professional efficacy were marginally non-significant ($\beta=.45$, $p=.05$). All moderations but two suggested that, at low levels of bullying, the scores of victims who perceived higher social support were linked with lower scores of burnout compared to those who perceived lower support. At relatively high levels of bullying, social support had no moderating effect. Two analyses however, indicated that the perception of relatively high emotional support was linked with an increased risk of experiencing emotional exhaustion with regards to work-related bullying and also to the overall bullying reported. Interestingly, emotional support was associated with such an increased risk only when employees reported relatively high levels of bullying.

Table 2

To address the second research question a series of hierarchical regressions were conducted as described above, each time including total burnout or one of its components as the outcome variable, total bullying or one of its three types as the IV, and one of the four sources of support as the M (see Table 3). According to the findings, the link between overall bullying and burnout was moderated by all sources of support except senior management. Support from senior management seemed to only moderate the effects of physically intimidating bullying while supervisors were the only source of support that moderated the effects of all three types of workplace bullying. Colleague support moderated the relationship between burnout and both person- and work-related bullying, while family support only moderated the link between burnout and bullying targeting the person. Person-related bullying was the type of bullying moderated by the most support resources, while physically intimidating bullying was the only type of bullying not to be moderated by the overall support workers experienced.

Table 3

Professional efficacy was involved in 14 significant moderations, exhaustion in 12 (two suggesting deterioration), and cynicism in 8. Contrary to the study's hypothesis, work-based sources of support moderated the links between bullying and all burnout components, but family support was only related to professional efficiency

as predicted. While the links between professional efficacy and overall bullying were moderated by both instrumental and emotional social support, cynicism was associated with instrumental and emotional exhaustion with emotional support. While overall social support moderated the effects of work-related bullying on cynicism, it moderated the effects of person-related bullying on emotional exhaustion and professional efficacy. Moreover, although instrumental support only moderated the effects of work-related bullying on cynicism, it moderated the effects of person-related bullying on all burnout components. Social support (emotional) moderated the effects of overall and work-related bullying on emotional exhaustion when bullying was high and those of person-related bullying on emotional exhaustion when bullying was low. Professional efficacy was the only burnout component to have its link with physically intimidating bullying moderated and the only component to be associated with senior management support in moderations involving any type of bullying.

Discussion

This study aimed to determine if different types of workplace bullying relate in dissimilar ways to the different forms of social support and burnout components. It was hypothesized that all forms of workplace bullying would correlate with burnout and specific forms of social support (instrumental, emotional, supervisor, and colleague) and that both instrumental and emotional support would moderate the link between bullying and burnout. It also had to be specified which types of social support would moderate the effects of which types of bullying, in relation to which components of burnout.

The present findings are in agreement with previous studies reporting a link between burnout and workplace bullying, particularly work-related (Giorgi, 2016; Laschinger, et al., 2010) while the correlations obtained were consistent with the conservation of resources model (Hobfoll, 1989). However, the difference between the work-related bullying/burnout and person-related bullying/burnout correlations observed in the present study was significantly larger than those reported by Laschinger, Grau, Finegan, and Wilk (2010). As these authors used a nurse sample, person-related bullying may be a greater problem in the caring professions, where personal qualities are more central in employee efficiency. The present study is also consistent with previous research on the protective role of social support

against the negative impact of bullying (De Beer, 2014; Gardner et al., 2013) and identifies links between particular types of workplace bullying and particular support resources. These findings are the first to support the general idea behind the matching hypothesis (Cohen & Wills, 1985) in relation to workplace bullying and complement previous research highlighting the importance of supervisor support as a buffer of work-related stress including bullying (Gardner et al., 2013; Laschinger et al., 2014). Compared to colleagues and family, line managers have the power to take specific measures that tackle bullying: taking disciplinary action against the perpetrators or enforcing changes that decrease bullying opportunities (e.g. move perpetrator and victim to different offices). Such action gives a message to the victimized employees that the organization is both capable and willing to defend them. As no information on the action actually taken by the managers of the specific employees was available, these are speculative assumptions that need to be directly tested in future research.

The current findings seem to contradict previous research downplaying the role of the family in protecting against work-related distress (Lee & Ashforth, 1996; Sochos et al., 2012). While those studies looked at the effects of relatively impersonal work stressors (e.g. work load, organizational characteristics), the present research focused on a more interpersonal and personal type of stress. As previous studies suggest (Losa Iglesias & De Bengoa Vallejo, 2012), bullying at work may elicit deep feelings of vulnerability and reduced sense of self-worth, signifying a psychological danger not necessarily associated with more impersonal work stressors. The perception of a psychological threat is more likely to activate the attachment system and make victims seek emotional protection from loved ones (Solomon & George, 1999). The deep personal vulnerability that workplace bullying creates was further highlighted by the almost complete lack of evidence for the moderating function of senior management support, the least personal of the four support resources assessed. Although no direct evidence has been collected in the present study, it may not be unreasonable to speculate that many ordinary employees are not in close everyday interaction with their senior managers and that may limit the managers' capacity to identify and effectively intervene against more subtle forms of bullying. However, senior managers may put in place policies and organizational processes that address the most obvious physical forms of bullying and

intimidation. Moreover, the seemingly anomalous finding that emotional support was associated with an increased risk of emotional exhaustion is in agreement with previous research reporting that emotion-based forms of support may increase dysfunctional coping such alcohol consumption when under work-stress (Hagihara, Miller, Tarumi, & Nobutomo, 2003). Perhaps the personal validation provided by the perception of emotional support (e.g. acceptance, being there to listen) is beneficial in the case of person-related bullying, but counterproductive in the case of bullying focused on work performance. While emotional support may strengthen the self-esteem and thus protect against emotional fatigue when the person is attacked, it may leave unchallenged problematic attitudes that maintain performance-related bullying – for example, tolerating excessive workload or harsh criticism as a gesture of accepting a manager's legitimate authority. Future research needs to investigate these findings further and confirm causal relationships that remain unclear in this correlational study.

The present study potentially extends previous research (Halbesleben, 2006; Leiter, 1993), suggesting that different burnout components are associated with different aspects of the work environment in different ways also when bullying is the occupational stressor. Our findings support Halbesleben's (2006) claim that the links between stress and exhaustion, resources and cynicism, and resources and personal accomplishment suggested by the conservation of resources model (Hobfoll, 1989; Hobfoll & Shirom, 2001) apply as long as specific forms rather than overall support are taken into account. However, the present study yielded two less anticipated findings: emotional exhaustion, a burnout component linked to work demands in previous research (Demerouti et al., 2001), was also related to emotional support in current moderations, while cynicism was related to instrumental support. Perceiving others as understanding and empathizing may have been helpful in reducing emotional exhaustion along with the sense of emotional loneliness and helplessness associated with it but not enough to actually inspire the employees to remain invested in their work. Moreover, considering that cynicism is a resource-related component of burnout only linked to family support in the current study, it would have been expected to be associated with support that was emotional rather than practical in nature. However, as Semmer, Elfering, Jacobshagen, Perrot, Beehr, and Boos (2008) have argued, tangible support carries emotional significance and

perhaps the perceived implementation of practical measures that reduce bullying is the required input to protect against emotional distancing from the job. More complex research designs need to confirm any causal links in the future.

The present study suggests that different types of bullying present different challenges to employees, as they are linked to different forms of psychological distress even in the presence of social support. For example, although supervisor and senior management support seemed to be linked with some positive self-evaluation among physically intimidated employees, no type of support moderated the effects of bullying on feelings of emotional exhaustion and distancing from the job. This is consistent with previous research evidencing a specific association between physical abuse in the workplace, emotional exhaustion and depersonalization among social workers (Jayaratne, et al., 1996). The current findings also indicate that workplace bullying was related with a depleted sense of professional efficacy, as no type of social support moderated such a link. Moreover, previous research has already confirmed that work-related bullying is the most damaging type of workplace bullying (Laschinger, et al., 2010), but the present findings specify how its negative impact may be manifested. The correlational nature of the present design does not allow us to draw causal inferences, but future longitudinal studies can explore such a potential impact further. In addition, the finding that overall social support moderated effects on cynicism in work-related bullying and effects on emotional exhaustion and professional efficacy in person-related bullying is consistent with previous research reporting that if the form of perceived support is not specified, overall support is not differentially related to the different aspects of burnout (Halbesleben, 2006). However, in the present study, it is also the particular type of stressor that created differential links with the burnout dimensions. It seems that when intimidation and harassment refers to an individual's professional ability, social support can moderate the development of a distancing coping response but may not moderate the experience of emotional exhaustion and the negative evaluation of the self.

It may be the case that the perception of social support, particularly support coming from the work environment, helps individuals remain engaged with the job while still experiencing emotional exhaustion and making negative evaluations of their own professional capability.

Research suggests that self-blaming is a typical response among abuse victims (Babcock & DePrince, 2012) and that low employee confidence is a significant issue in the workforce (De Jong, De Ruyter, & Wetzels, 2006). As employees may also perceive work disengagement as a step towards job loss (Leiter & Maslach, 2009) they may non-consciously find it less threatening to remain engaged with the job even at a high cost. On the other hand, when intimidation does not refer to their work, employees may be less susceptible to low work confidence, their need to resort to self-blame is less strong and so can remain disengaged from work while they reduce their emotional exhaustion and improve their self-evaluation. These of course are speculative thoughts as potentially relevant variables such as self-blame and fear to lose a job have not been considered. As this was a correlational study with a single measurement point causal links cannot be established. Unaccounted for variables such work stressors other than bullying (e.g. work load, time on the job) or demographic characteristics (e.g. gender, ethnicity) may impact burnout and its associations with bullying and social support. Additional limitations of the study include the convenience nature of the sample and the inclusion of employees from many different sectors. To address these limitations, future research should include longitudinal designs, assess multiple stressors, recruit more representative samples, and make cross-sector comparisons.

The current research may inform interventions designed to address bullying and burnout in the workplace, including those focused on raising awareness, changing the organisational culture, and supporting victims through counseling or psychotherapy (Kemp, 2014; Saam, 2009). As the study identifies interpersonal and work role processes that may inhibit or facilitate bullying, it may help focus intervention efforts. For example, it may inform programs seeking to increase awareness among work supervisors and their ability to distinguish between constructive feedback, boundary setting, and interpersonal aggression. It may also help raise awareness among senior managers highlighting their importance in tackling physically intimidating bullying and creating a climate of violence prevention in an organization. Previous research suggests that such a climate is critical in predicting future physical abuse (Spector, Yang, & Zhou, 2015). The present study also indicates that identifying the type of bullying more likely to occur in an organization or a division may help mental

health professionals working with human resources departments design more specialized and targeted programs. It pinpoints to the types of support more likely to be effective in relation to a particular type of bullying, perhaps drawing particular attention to physical intimidation, the form of bullying that was the least associated with social support in our study. The assistance offered to physically intimidated victims should perhaps go beyond what is currently available, extending both the range of resources and their supportive capacity. Interventions should also consider the limitations and potentially negative effects of certain acceptance behaviors implicated in the construct of perceived emotional support, particularly in reference to work-related bullying. The findings can also inform all three types of burnout interventions commonly used – person-directed, organization-directed, and combined currently used (Awa, Plaumann, & Walter, 2010). They can focus an intervention on the aspects of work-related stress most likely to occur in the context of a particular type of bullying and the type of support most likely to be protective. Overall, the present study highlighted links between workplace bullying and workers' mental health, providing potentially useful information to workplace mental health professionals and human

resource departments as they design anti-bullying and anti-burnout interventions.

References

- Awa, W.L., Plaumann, M., & Walter, U. (2010). Burnout prevention: a review of intervention programs. *Patient Education and Counseling*, 78(2), 184-190. doi:10.1016/j.pec.2009.04.008
- Babcock, R. L., & DePrince, A.P. (2012). Childhood betrayal trauma and self-blame appraisals among survivors of intimate partner abuse. *Journal of Trauma & Dissociation: The Official Journal of the International Society for the Study of Dissociation (ISSD)*, 13(5), 526-538. doi. 10.1080/15299732.2012.694842
- Bjorkqvist, K., Osterman, K., & Hjeltback, M. (1994). Aggression among university employees. *Aggressive Behavior*, 20(3), 173-184. doi. 10.1002/1098-2337
- Brotheridge, C. M., & Lee, R. T. (2010). Restless and confused: Emotional responses to workplace bullying in men and women. *The Career Development International*, 15(7), 687-707. doi:10.1108/13620431011094087
- Cassidy, T., McLaughlin, M., & McDowell, E. (2014). Bullying and health at work: The mediating roles of psychological capital and social support. *Work & Stress*, 28(3), 255-269. doi.org/10.1080/02678373.2014.927020
- Cohen, S., Mermelstein, R., Kamarck, T., & Hoberman, H. M. (1985). Measuring the functional components of social support. In I. G. Sarason & B. R. Sarason (Eds.), *Social Support: Theory, Research, and Applications* (pp. 73–94). The Hague: Martinus Nijhoff.
- Cohen, S., Underwood, L. G., & Gottlieb, B. H. (2000). *Social Support Measurement and Intervention*. Oxford, UK: Oxford University Press.

- Cohen, S., & Wills, T. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357. doi. 10.1037/0033-2909.98.2.310
- Constable, J. & Russel, D. (1986). The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress*, 12(1), 20-26. doi.org/10.1080/0097840X.1986.9936762
- De Beer, L. T. (2014). Emotional load and social support as indicators of bullying at work. *Journal of Psychology in Africa*, 24(2), 154-158. doi.10.1080/14330237.2014.903068
- Declercq, F. D. R., Vanheule, S., Markey, S., & Willemsen, J. (2007). Posttraumatic distress in security guards and the various effects of social support. *Journal of Clinical Psychology*, 63(12), 1239–1246. doi.org/10.1002/jclp.20426
- Deery, S., Walsh, J., & Guest, D. (2011). Workplace aggression: The effects of harassment on job burnout and turnover intentions. *Work, Employment and Society*, 25(4), 742–759. doi.org/10.1177/0950017011419707
- Deeter-Schmelz, D. R., & Ramsey, R. P. (1997). Considering sources and types of social support: A psychometric evaluation of the House and Wells (1978) instrument. *The Journal of Personal Selling and Sales Management*, 49-61.
- De Jong, A., De Ruyter, K., & Wetzels, M. (2006). Linking Employee Confidence to Performance: A Study of Self-Managing Service Teams. *Journal of the Academy of Marketing Science*, 34(4), 576-587. doi.10.1177/0092070306287126
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands- resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. doi.org/10.1037/0021-9010.86.3.499
- Einarsen S., Hoel H., Zapf D. & Cooper C. (2003). The concept of bullying at work: the European tradition. In *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice* (Einarsen S., Hoel H., Zapf D. & Cooper C., Eds), Taylor & Francis, London, pp. 3–30.
- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psycho-metric properties of the Negative Acts Questionnaire-Revised. *Work & Stress*, 23(1), 24–44. doi.org/10.1080/02678370902815673
- Gardner, D., Bentley, T., Catley, B., Cooper-Thomas, H., O'Driscoll, M., & Trenberth, L. (2013). Ethnicity, workplace bullying, social support and psychological strain in Aotearoa/New Zealand. *New Zealand Journal of Psychology*, 42(2), 84-91.
- Giorgi, G., Mancuso, S., Fiz Perez, F., Castiello D'Antonio, A., Mucci, N., Cupelli, V., et al., (2016). Bullying among nurses and its relationship with burnout and organizational climate. *International Journal of Nursing Practice*, 22(2), 160-168. doi.org/10.1111/ijn.12376
- Hagihara, A., Miller, A. S., Tarumi, K., & Nobutomo, K. (2003). Social support has both positive and negative effects on the relationship of work stress and alcohol consumption. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 19(4), 205-215. doi:10.1002/smi.977
- Halbesleben, J. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, 91(5), 1134-1145. doi.10.1037/0021-9010.91.5.1134
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *The American Psychologist*, 44(3), 513-524. doi.org/10.1037/0003-066X.44.3.513
- Hobfoll, S. E., & Shirom, A. (2001). Conservation of resources theory: Applications to stress and management in the workplace. In R. T. Golembiewski, R. T. Golembiewski (Eds.), *Handbook of Organizational Behavior*, 2nd ed., rev. ed. and exp.ed (pp. 57–80). New York, NY, US: Marcel Dekker.

- House, J. & Wells, J. (1978). Occupational stress, social support, and health. In A. McLean, G. Black, and M. Colligan (Eds.), *Reducing Occupational Stress: Proceedings of a Conference* (pp.8-19). Washington DC: National Institute of Occupational Safety and Health.
- Jayarathne, S., Vinokur-Kaplan, D., Nagda, B., & Chess, W. (1996). A national study on violence and harassment of social workers by clients. *Journal of Applied Social Sciences*, 20(1), 1-14.
- Jenkins, R. & Elliot, P. (2004). Stressors, burnout and social support: Nurses in acute mental health settings. *Journal of Advanced Nursing*, 48(6), 622-631. doi.org/10.1111/j.1365-2648.2004.03240.x
- Kemp, V. (2014). Antecedents, consequences and interventions for workplace bullying. *Current Opinion in Psychiatry*, 27(5), 364-368. doi:10.1097/YCO.0000000000000084
- Kivimäki, M., Virtanen, M., Vartiainen, M., Elovainio, M., & Vahtera, J. (2003). Workplace bullying and the risk of cardiovascular disease and depression. *Occupational and Environmental Medicine*, 60(10), 779-783. doi.org/10.1136/oem.60.10.779
- Laschinger, H. K. S., & Fida, R. (2014). A time-lagged analysis of the effect of authentic leadership on workplace bullying, burnout, and occupational turnover intentions. *European Journal of Work and Organizational Psychology*, 23(5), 739-753. doi.org/10.1080/1359432X.2013.804646
- Laschinger, H. S., Grau, A. L., Finegan, J., & Wilk, P. (2010). New graduate nurses experiences of bullying and burnout in hospital settings. *Journal of Advanced Nursing*, 66(12), 2732-2742. doi:10.1111/j.1365-2648.2010.05420.x
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123. doi.org/10.1037/0021-9010.81.2.123
- Leiter, M. P. (1993). Burnout as a developmental process: Consideration of models. In W. B. Schaufeli, C. Maslach, T. Marek, W. B. Schaufeli, C. Maslach, T. Marek (Eds.), *Professional Burnout: Recent Developments in Theory and Research* (pp. 237-250). Philadelphia, PA, US: Taylor & Francis.
- Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management*, 17(3), 331-339. doi:10.1111/j.1365-2834.2009.01004.
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work and Organizational Psychology*, 5(2), 165-184. doi.org/10.1080/13594329608414853
- Lin, N., & Ensel, W.M. (1984). Depression-morbidity and its social etiology: The role of life events and social support. *Journal of Health and Social Behavior*, 25, 176-188. doi.org/10.2307/2136667
- Losa Iglesias, M. E., & de Bengoa Vallejo, R. B. (2012). Prevalence of bullying at work and its association with self-esteem scores in a Spanish nurse sample. *Contemporary Nurse*, 42(1), 2-10. doi:10.5172/conu.2012.42.1.2 doi.org/10.5172/conu.2012.2085
- Maslach C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2(2), 99-113. doi.org/10.1002/job.4030020205
- Maslach C., Jackson, S.E. & Leiter M.P. (1996). *Maslach Burnout Inventory-test Manual*, (3rd Ed) Paulo Alto, C.A: Consulting Psychologists Press Inc.
- Maslach, C., Schaufeli, W.B. & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. doi.org/10.1016/B978-0-12-397045-9.00149-X
- O'Moore, M., Seigne, E., McGuire, L., & Smith, M. (1998). Bullying at work in Ireland. *Journal of Occupational Health and Safety*, 19(6), 569-574.

- Paunonen, S., & Jackson, D. (1988). Type I error rates for moderated multiple regression analysis. *Journal of Applied Psychology*, 73(3), 569-573.
- Prins, J. T., Hoekstra-Weebers, J. E. H. M., Gazendam-Donofrio, S. M., Van De Wiel, H. B. M., Sprangers, F., Jaspers, F. C. A., & Van der Heijden, F. M. M. A. (2007). The role of social support in burnout among Dutch medical residents. *Psychology, Health and Medicine*, 12(1), 1-6. doi.org/10.1080/13548500600782214.
- Rex-Lear, M., Knack, J. M., & Jensen-Campbell, L. A. (2012). Beyond the playground: Bullying in the workplace and its relation to mental and physical health outcomes. In R. J. Gatchel, I. Z. Schultz, R. J. Gatchel, I. Z. Schultz (Eds.), *Handbook of Occupational Health and Wellness* (pp. 219-240). New York, NY, US: Springer.
- Rodriguez-Munoz, A., Moreno-Jimenez, B., Vergel, A. I. S., & Hernandez, E. G. (2010). Posttraumatic symptoms among victims of workplace bullying: Exploring gender differences and shattered assumptions. *Journal of Applied Social Psychology*, 40(10), 2616-2635. doi.org/10.1111/j.1559-1816.2010.00673.x
- Rospenda, K. M., & Richman, J. A. (2004). The factor structure of Generalized Workplace Harassment. *Violence and Victims*, 19(2), 221-238. doi.org/10.1891/vivi.19.2.221.64097
- Saam, N. J. (2010). Interventions in workplace bullying: A multilevel approach. *European Journal of Work and Organizational Psychology*, 19(1), 51-75. doi:10.1080/13594320802651403.
- Samnani, A., & Singh, P. (2012). 20 years of workplace bullying research: A review of the antecedents and consequences of bullying in the workplace. *Aggression and Violent Behavior*, 17(6), 581-589. doi.org/10.1016/j.avb.2012.08.004.
- Sarason, B. R., Sarason, I. G., & Gurung, R. R. (2001). Close personal relationships and health outcomes: A key to the role of social support. In B. R. Sarason, S. Duck, B. R. Sarason, S. Duck (Eds.), *Personal relationships: Implications for Clinical and Community Psychology* (pp. 15-41). New York, NY, US: John Wiley & Sons Ltd.
- Saunders P., Huynh A. & Goodman-Delahunty J. (2007) Defining workplace bullying behaviour professional lay definitions of workplace bullying. *International Journal of Law and Psychiatry* 30(4), 340-354. doi.org/10.1016/j.ijlp.2007.06.007
- Schaufeli, W.B., Leiter, M.P., Maslach, C. & Jackson, S.E. (1996) MBI-General Survey. In the *Maslach Burnout Inventory-test Manual*, 3rd Ed (Maslach C., Jackson, S.E. and Leiter M.P. Eds), Consulting Psychologists Press, Paulo Alto, C.A, pp. 22-26.
- Semmer, N. K., Elfering, A., Jacobshagen, N., Perrot, T., Beehr, T. A., & Boos, N. (2008). The emotional meaning of instrumental social support. *International Journal of Stress Management*, 15(3), 235-251. doi:10.1037/1072-5245.15.3.235
- Sochos, A., Bowers, A. & Kinman, G. (2012). Work stressors, social support, and burnout in junior doctors: exploring direct and indirect pathways. *Journal of Employment Counseling*, 49(2), 62-73. doi.org/10.1002/j.2161-1920.2012.00007.x
- Solomon, J. & George, C. (1999). *Attachment Disorganization*. Guildford Press: New York.
- Spector, P. E., Yang, L., & Zhou, Z. E. (2015). A longitudinal investigation of the role of violence prevention climate in exposure to workplace physical violence and verbal abuse. *Work & Stress*, 29(4), 325-340. doi:10.1080/02678373.2015.1076537
- Viswesvaran, C., Sanchez, J., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54(2), 314-334. doi.org/10.1006/jvbe.1998.1661

TABLES

Table 1

Means, standard deviations, and correlation coefficients between study variables.

	1. Bullying Total (M=37.16, SD=14.18)	2	3	4	5	6	7	8	9	10	11	12	13	14
2. Person-Related Bullying (M=11.64, SD=4.65)	.91**													
3. Work-Related Bullying (M=20.87, SD=8.29)	.95**	.77**												
4. Phys Intimidating Bullying (M=4.65, SD=2.58)	.79**	.73**	.64**											
5. Social Support Total (M=76.46, SD=21.22)	-.38**	-.34**	-.36**	-.28**										
6. Instrumental Support (M=50.56, SD=14.18)	-.37**	-.33**	-.36**	-.28**	.99**									
7. Emotional Support (M=25.9, SD=7.56)	-.37**	-.34**	-.35**	-.28**	.95**	.89**								
8. Family Support (M=21.44, SD=6.8)	-.12	-.11	-.11	-.13	.69**	.67**	.67**							
9. Supervisor Support (M=18.48, SD=6.52)	-.43**	-.39**	-.41**	-.34**	.91**	.90**	.86**	.46**						
10. Colleague Support (M=20.59, SD=6.02)	-.24**	-.29**	-.22**	-.14*	.81**	.80**	.79**	.45**	.70**					
11. Management Support (M=15.94, SD=7.14)	-.4**	-.32**	-.42**	-.29**	.80**	.80**	.75**	.29**	.75**	.50**				
12. Burnout Total (M=47.8, SD=10.83)	.48**	.33**	.52**	.36**	-.29**	-.29**	-.26**	-.06	-.35**	-.09	-.41**			
13. Exhaustion (M=15.26, SD=5.9)	.51**	.36**	.55**	.38**	-.20**	-.22**	-.17*	.02	-.28**	-.03	-.34**	.83**		
14. Cynicism (M=11.06, SD=4.91)	.50**	.40**	.51**	.40**	-.26**	-.25**	-.27**	.02	-.35**	-.09	-.40**	.86**	.68**	
15. Professional Efficacy (M=11.17, SD=3.93)	.12	.08	.13*	.12	-.29**	-.28**	-.29**	-.33**	-.21**	-.13*	-.25**	.41**	.11	.17**

Note. * $p < .05$, ** $p < .01$

Table 2:

Moderating effects of instrumental and emotional social support on the link between workplace bullying and burnout

Dependent Variable	Independent Variables In Final Model	Beta	p	R ²	Adj R ²	ΔF (p)	Df
Burnout Total	Final Model			.3	.28	5.76 (p=.017)	1, 215
	Gender	-.14	.019				
	Age	-.1	.018				
	Bullying Total	.02	.9				
	Social Support Total	-.47	.001				
	Bullying Total*						
	Social Support Total	.44	.017				
Exhaustion	Final Model			.3	.28	4.97 (p=.027)	1, 215
	Gender	-.14	.022				
	Age	-.07	.225				
	Bullying Total	.13	.5				
	Social Support Total	-.33	.024				
	Bullying Total*						
	Social Support Total	.41	.027				
Cynicism	Final Model			.29	.28	4.07 (p<.045)	1, 215
	Gender	-.09	.111				
	Age	-.11	.064				
	Bullying Total	.12	.517				
	Social Support Total	-.37	.011				
	Bullying Total*						
	Social Support Total	.37	.045				
Professional Efficacy	Final Model			.12	.09	4.9 (p=.028)	1, 215
	Gender	-.06	.403				
	Age	.01	.922				
	Bullying Total	-.417	.047				
	Social Support Total	-.62	<.001				
	Social Support Total*						
	Bullying Total	.46	.028				
Burnout Total	Final Model			.21	.19	6.57 (p=.011)	1, 215
	Gender	-.12	.054				
	Age	-.12	.048				
	Person-Related Bullying	-.19	.327				
	Social Support Total	-.57	<.001				
	Person-Related Bullying*						
	Social Support Total	.5	.011				

Exhaustion	Final Model			.18	.16	5.02 (p=.026)	1, 215
	Gender	-.12	.066				
	Age	-.1	.133				
	Person-Related Bullying	-.07	.714				
	Social Support Total	-.42	.006				
	Person-Related Bullying*						
Professional Efficacy	Social Support Total	.45	.026				
	Final Model			.12	.1	8.03 (p=.005)	1, 215
	Gender	-.05	.433				
	Age	.01	.91				
	Person-Related Bullying	-.57	.006				
	Social Support Total	-.71	<.001				
Burnout	Person-Related Bullying*						
	Social Support Total	.58	.005				
	Final Model			.32	.31	3.97 (p=.048)	1, 215
	Gender	-.14	.018				
	Age	-.09	.129				
	Work-Related Bullying	.14	.450				
Cynicism	Social Support Total	-.39	.005				
	Work-Related Bullying*						
	Social Support Total	.36	.048				
	Final Model			.3	.28	4.09 (p=.044)	1, 215
	Gender	-.09	.131				
	Age	-.1	.097				
Burnout	Work-Related Bullying	.12	.514				
	Social Support Total	-.36	.010				
	Work-Related Bullying*						
	Social Support Total	.37	.044				
	Final Model			.3	.28	7.32 (p=.007)	1, 215
	Gender	-.04	.02				
Exhaustion	Age	-.1	.102				
	Bullying Total	-.02	.92				
	Emotional Support	.51	.00				
	Bullying Total*						
	Emotional Support	-.5	.00				
	Final Model			.31	.29	7.14 (p=.008)	1, 215
Professional Efficacy	Gender	-.13	.02				
	Age	-.06	.27				
	Bullying Total	.07	.7				
	Emotional Support	-.36	.02				
	Bullying Total*						
	Emotional Support	.49	.01				
Professional Efficacy	Final Model			.11	.09	4.83 (p=.029)	1, 215
	Gender	-.06	.4				
	Age	.01	.82				
	Bullying Total	-.41	.05				
	Emotional Support	-.63	.00				
	Bullying Total*						
Professional Efficacy	Emotional Support	.46	.03				

Burnout Total	Final Model			.29	.28	4.3 (p=.028)	1, 215
	Gender	-.14	.02				
	Age	-.11	.07				
	Bullying Total	-.45	.00				
	Instrumental Support	.06	.72				
	Bullying Total*						
	Instrumental Support	.4	.03				
Cynicism	Final Model			.29	.28	4.23 (p=.041)	1, 215
	Gender	-.1	.11				
	Age	-1.11	.06				
	Bullying Total	-.37	.01				
	Instrumental Support	.12	.49				
	Bullying Total*						
	Instrumental Support	.38	.04				
Professional Efficacy	Final Model			.1	.08	4.85 (p=.029)	1, 215
	Gender	-.05	.42				
	Age	.00	.94				
	Bullying Total	-.61	.00				
	Instrumental Support	-.4	.05				
	Bullying Total *						
	Instrumental Support	.45	.03				
Burnout Total	Final Model			.2	.18	7.34 (p=.007)	1, 215
	Gender	-.12	.06				
	Age	-.11	.07				
	Person-Related Bullying	-.58	.00				
	Emotional Support	-.19	.31				
	Person-Related Bullying*						
	Emotional Support	.52	.01				
Exhaustion	Final Model			.18	.16	5.94 (p=.016)	1, 215
	Gender	-.12	.07				
	Age	-.09	.18				
	Person-Related Bullying	-.41	.01				
	Emotional Support	-.07	.69				
	Person-Related Bullying*						
	Emotional Support	.47	.02				
Professional Efficacy	Final Model			.12	.1	7.99 (p=.005)	1, 215
	Gender	-.05	.43				
	Age	.02	.79				
	Person-Related Bullying	-.71	.00				
	Emotional Support	-.54	.01				
	Person-Related Bullying*						
	Emotional Support	.57	.00				
Burnout Total	Final Model			.2	.19	6 (p=.015)	1, 215
	Gender	-.12	.05				
	Age	-.13	.04				
	Person-Related Bullying	-.56	.00				
	Instrumental Support	-.16	.4				
	Person-Related Bullying*						
	Instrumental Support	.48	.01				

Exhaustion	Final Model			.18	.16	4.37 (p=.038)	1, 215
	Gender	-.12	.06				
	Age	-.1	.11				
	Person-Related Bullying	-.42	.01				
	Instrumental Support	-.04	.82				
	Person-Related Bullying*	.42	.04				
	Instrumental Support						
Cynicism	Final Model			.21	.2	4.17 (p=.042)	1, 215
	Gender	-.08	.18				
	Age	-.13	.03				
	Person-Related Bullying	-.43	.00				
	Instrumental Support	-.01	.96				
	Person-Related Bullying*						
	Instrumental support	.4	.04				
Professional Efficacy	Final Model			.11	.09	7.84 (p=.006)	1, 215
	Gender	-.05	.44				
	Age	.00	.95				
	Person-Related Bullying	-.69	.00				
	Instrumental Support	-.55	.01				
	Person-Related Bullying*						
	Instrumental Support	.58	.006				
Burnout Total	Final Model			.32	.31	5.12 (p=.025)	1, 215
	Gender	-.14	.02				
	Age	-.08	.15				
	Work-Related Bullying	-.42	.00				
	Emotional Support	.09	.62				
	Work-Related Bullying*						
	Emotional Support	.42	.02				
Exhaustion	Final Model			.34	.32	5.67 (p=.018)	1, 215
	Gender	-.13	.02				
	Age	-.05	.38				
	Work-Related Bullying	-.29	.04				
	Emotional Support	.15	.4				
	Work-Related Bullying*						
	Emotional Support	.44	.02				
Cynicism	Final Model			.3	.28	4.05 (p=.045)	1, 215
	Gender	-.09	.13				
	Age	-.09	.1				
	Work-Related Bullying	-.35	.01				
	Instrumental Support	.14	.45				
	Work-Related Bullying*						
	Instrumental Support	.36	.04				
Professional Efficacy	Final Model			.11	.09	6.23 (p=.013)	1, 215
	Gender	-.05	.45				
	Age	.01	.82				
	Phys Intimidating Bullying	-.58	.00				
	Emotional Support	-.49	.03				
	Phys Intimidating Bullying*						
	Emotional Support	.55	.01				

Table 3

Moderating effects of social support sources on the link between workplace bullying and burnout.

Dependent Variable	Independent Variables	Beta ^a	p ^a	R ²	Adj R ²	ΔF (p)	Df
Burnout	Final Model			.29	.27	9.06 (p<.003)	1, 215
	Gender	-.13	.029				
	Age	-.08	.196				
	Bullying	-.01	.961				
	Family Support	-.48	.003				
	Bullying*Family Support	.66	.003				
Cynicism	Final Model			.3	.28	8.03 (p=.005)	1, 215
	Gender	-.08	.161				
	Age	-.08	.204				
	Bullying	.05	.774				
	Family Support	-.35	.027				
	Bullying*Family Support	.61	.005				
Exhaustion	Final Model			.3	.29	4.44 (p<.036)	1, 215
	Gender	-.14	.02				
	Age	-.08	.175				
	Bullying	-.39	.013				
	Supervisor Support	.19	.206				
	Bullying*Supervisor Support	.34	.036				
Professional Efficacy	Final Model			.06	.04	4.6 (p=.033)	1, 215
	Gender	-.05	.457				
	Age	.02	.757				
	Bullying	-.54	.003				
	Supervisor Support	-.3	.091				
	Bullying*Supervisor Support	.4	.033				
Burnout	Final Model			.29	.27	8.91 (p=.003)	1, 215
	Gender	-.13	.036				
	Age	-.09	.132				
	Bullying	.04	.818				
	Colleague Support	-.39	.008				
	Bullying*Colleague Support	.55	.003				
Exhaustion	Final Model			.31	.29	5.88 (p=.016)	1, 215
	Gender	-.12	.047				
	Age	-.01	.261				
	Bullying	.17	.292				
	Colleague Support	-.24	.086				
	Bullying*Colleague Support	.44	.016				

Cynicism	Final Model			.29	.27	4.84 (p=.029)	1, 215
	Gender	-.08	.139				
	Age	-.1	.093				
	Bullying	.18	.289				
	Colleague Support	-.27	.056				
	Bullying*Colleague Support	.41	.029				
Professional Efficacy	Final Model			.08	.06	12.17 (p=.001)	1, 215
	Gender	-.05	.429				
	Age	.03	.689				
	Bullying	-.51	.007				
	Colleague Support	-.63	.000				
	Bullying*Colleague Support	.73	.001				
Burnout	Final Model			.18	.16	9.59 (p=.002)	1, 215
	Gender	-.11	.076				
	Age	-.1	.124				
	Person-Related Bullying	-.18	.324				
	Family Support	-.51	.002				
	Person-Related Bullying* Family Support	.69	.002				
Cynicism	Final Model			.21	.19	7.88 (p=.005)	1, 215
	Gender	-.07	.247				
	Age	-.1	.125				
	Person-Related Bullying	-.06	.755				
	Family Support	-.37	.022				
	Person-Related Bullying* Family Support	.61	.005				
Professional Efficacy	Final Model			.15	.13	8.36 (p=.004)	1, 215
	Gender	-.06	.381				
	Age	-.00	.952				
	Person-Related Bullying	-.45	.015				
	Family Support	-.77	.000				
	Person-Related Bullying* Family Support	.66	.004				
Exhaustion	Final Model			.19	.18	3.98 (p=.047)	1, 215
	Gender	-.12	.065				
	Age	-.1	.122				
	Person-Related Bullying Supervisor Support	.01	.966				
	Person-Related Bullying* Supervisor Support	-.48	.004				
	Supervisor Support	.36	.047				
Professional Efficacy	Final Model			.07	.05	6.37(p=.012)	1, 215
	Gender	-.05	.497				
	Age	.02	.718				
	Person-Related Bullying Supervisor Support	-.41	.021				
	Person-Related Bullying* Supervisor Support	-.62	.001				
	Supervisor Support	.48	.012				

Burnout	Final Model			.16	.14	5.88 (p=.016)	1, 215
	Gender	-.11	.089				
	Age	-.11	.102				
	Person-Related Bullying Colleague Support	-.06	.756				
	Person-Related Bullying* Colleague Support	-.36	.02				
		.47	.016				
Exhaustion	Final Model			.17	.15	4.2 (p=.042)	1, 215
	Gender	-.1	.113				
	Age	-.08	.191				
	Person-Related Bullying Colleague Support	.05	.763				
	Person-Related Bullying* Colleague Support	-.24	.12				
		.4	.042				
Burnout	Final Model			.32	.31	8.54 (p=.004)	1, 215
	Gender	-.13	.031				
	Age	-.08	.182				
	Work-Related Bullying Colleague Support	.08	.64				
	Work-Related Bullying* Colleague Support	-.36	.009				
		.54	.004				
Exhaustion	Final Model			.34	.32	4.68 (p=.032)	1, 215
	Gender	-.12	.043				
	Age	-.05	.37				
	Work-Related Bullying Colleague Support	.24	.142				
	Work-Related Bullying* Colleague Support	-.2	.139				
		.39	.032				
Cynicism	Final Model			.29	.28	5.41 (p=.021)	1, 215
	Gender	-.08	.188				
	Age	-.09	.13				
	Work-Related Bullying Colleague Support	.15	.387				
	Work-Related Bullying* Colleague Support	-.29	.037				
		.44	.021				
Professional Efficacy	Final Model			.08	.06	11.48 (p=.001)	1, 215
	Gender	-.06	.406				
	Age	.02	.722				
	Work-Related Bullying Colleague Support	-.51	.01				
	Work-Related Bullying* Colleague Support	-.6	.000				
		.73	.001				
Exhaustion	Final Model			.34	.33	4.72 (p=.031)	1, 215
	Gender	-.14	.017				
	Age	-.06	.265				
	Work-Related Bullying Supervisor Support	.25	.079				
	Work-Related Bullying* Supervisor Support	-.35	.012				
		.32	.031				

Professional Efficacy	Final Model			.07	.05	5.51 (p=.020)	1, 215
	Gender	-.04	.54				
	Age	.02	.798				
	Phys Intimidating Bullying	-.34	.063				
	Supervisor Support	-.47	.001				
	Phys Intimidating Bullying*						
	Supervisor Support	.43	.02				
Professional Efficacy	Final Model			.09	.07	5.96 (p=.015)	1, 215
	Gender	-.04	.504				
	Age	.00	.992				
	Physically-Intimidating Bullying	-.54	.000				
	Management Support	-.28	.064				
	Phys Intimidating Bullying*						
	Management Support	.41	.015				